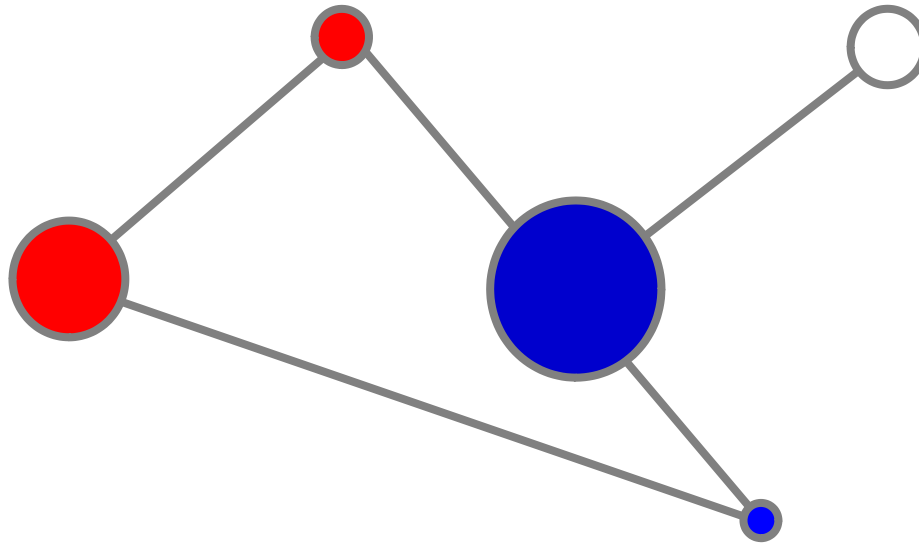


SDI.Next: Linked Spatial Data in Europe – March 12th, 2019



**LOD
Slovakia**



**Linked Data
Alliance Austria**

Agenda

2016

LOD Slovakia 1.0

2017

LOD Slovakia 2.0

Slovakian Semantic Interoperability Framework

2018

LOD Slovakia 3.0 (Graph4Jan)

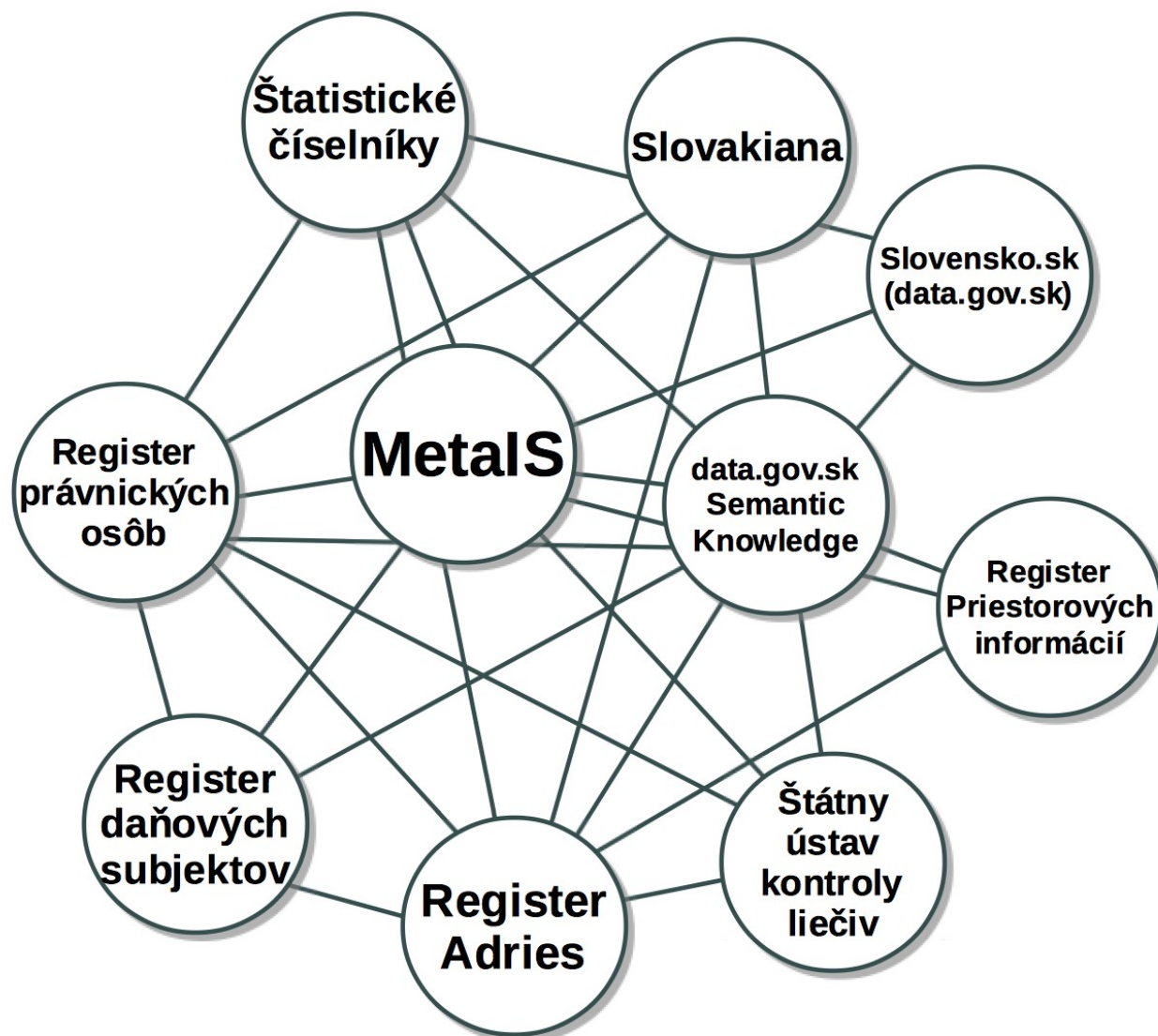
2019

Linked Data Alliance Austria

Conclusion

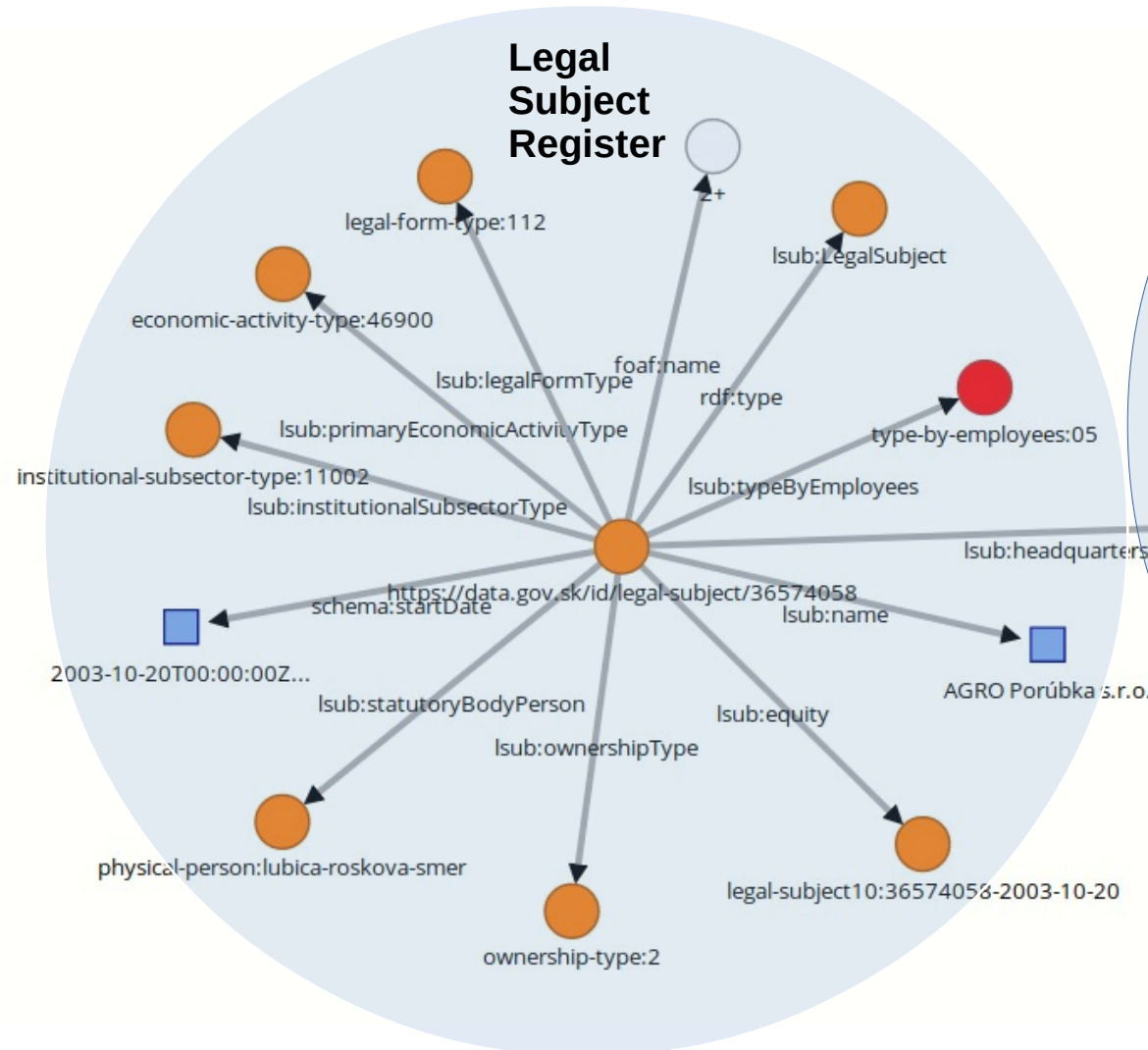
2016

LOD Slovakia 2016

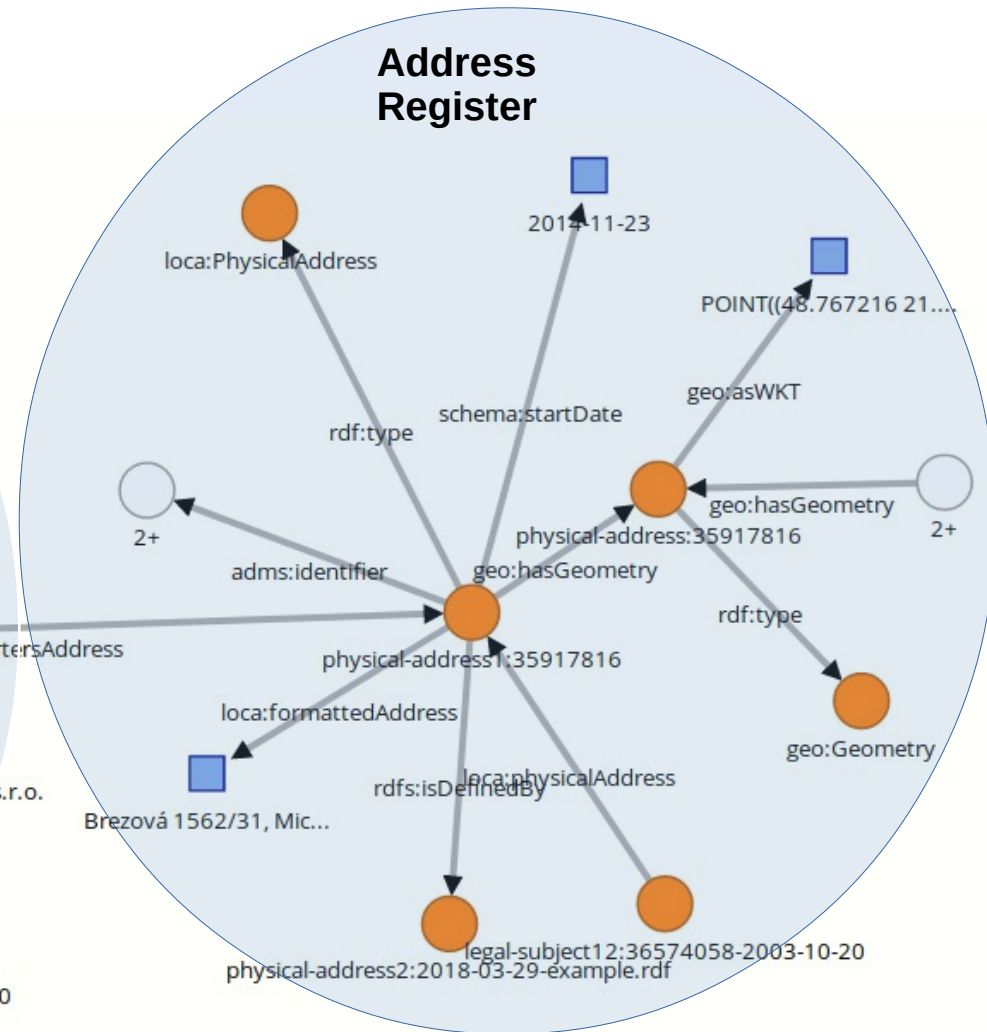


LOD Slovakia 2016

Legal Subject Register

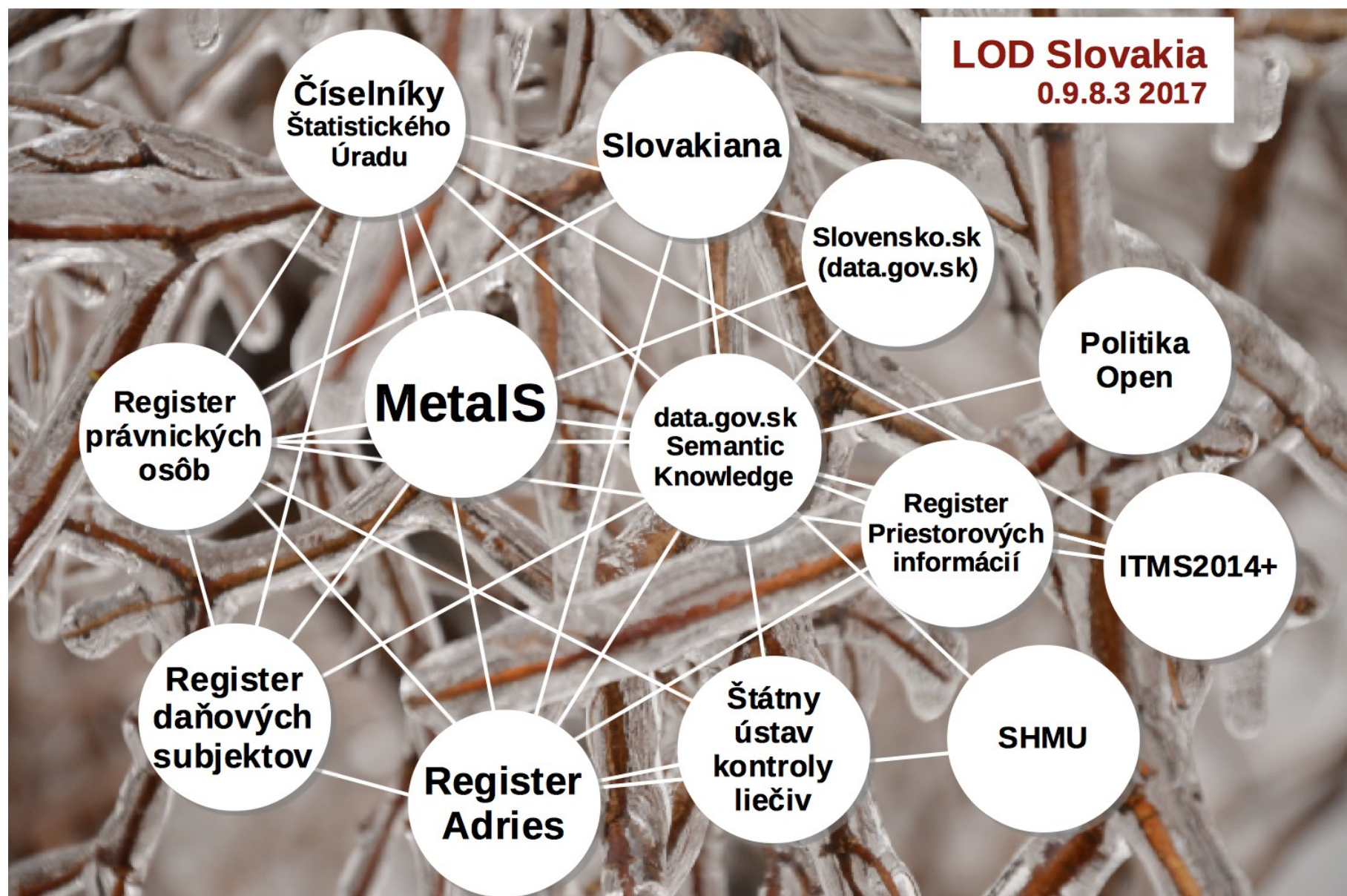


Address Register

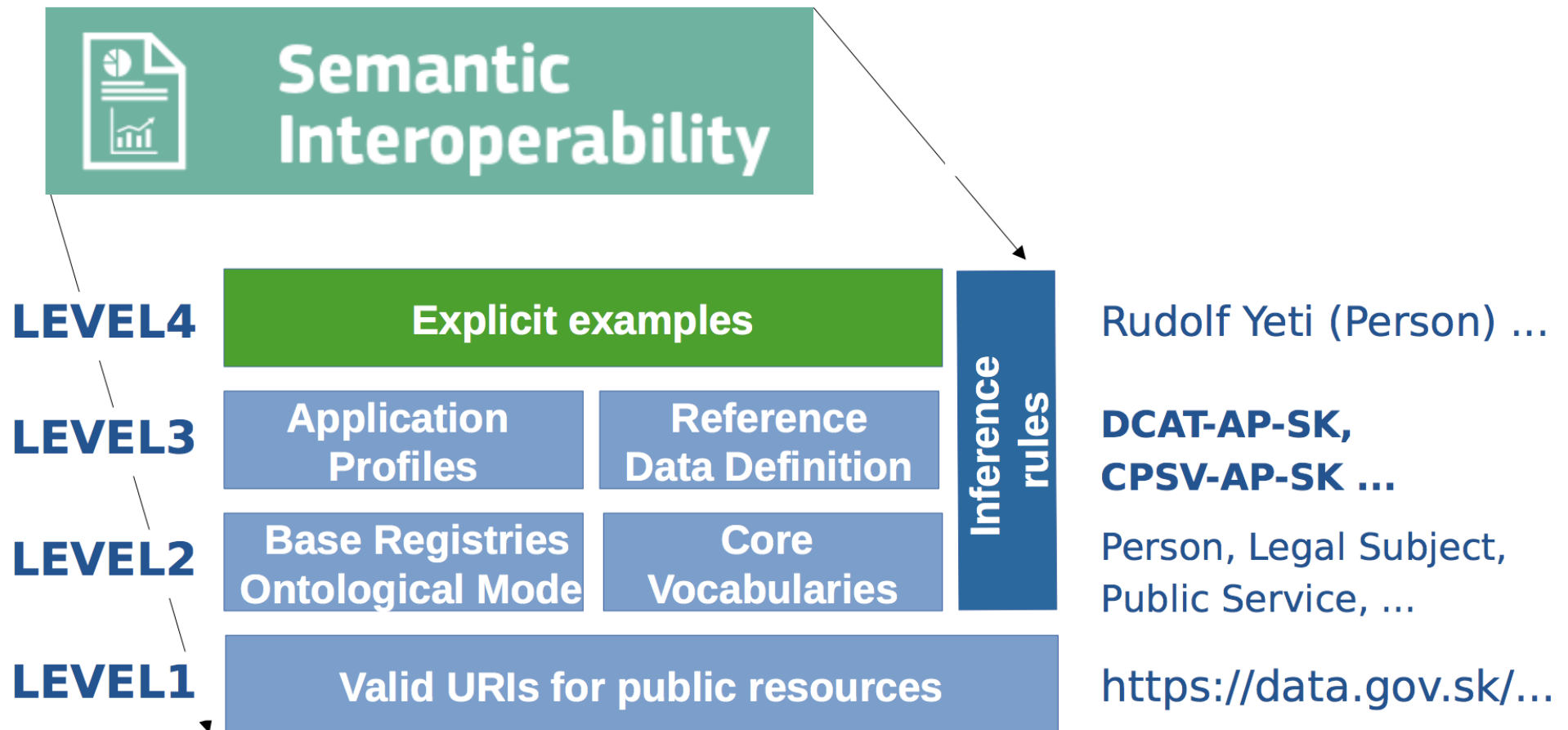


2017

LOD Slovakia 2017



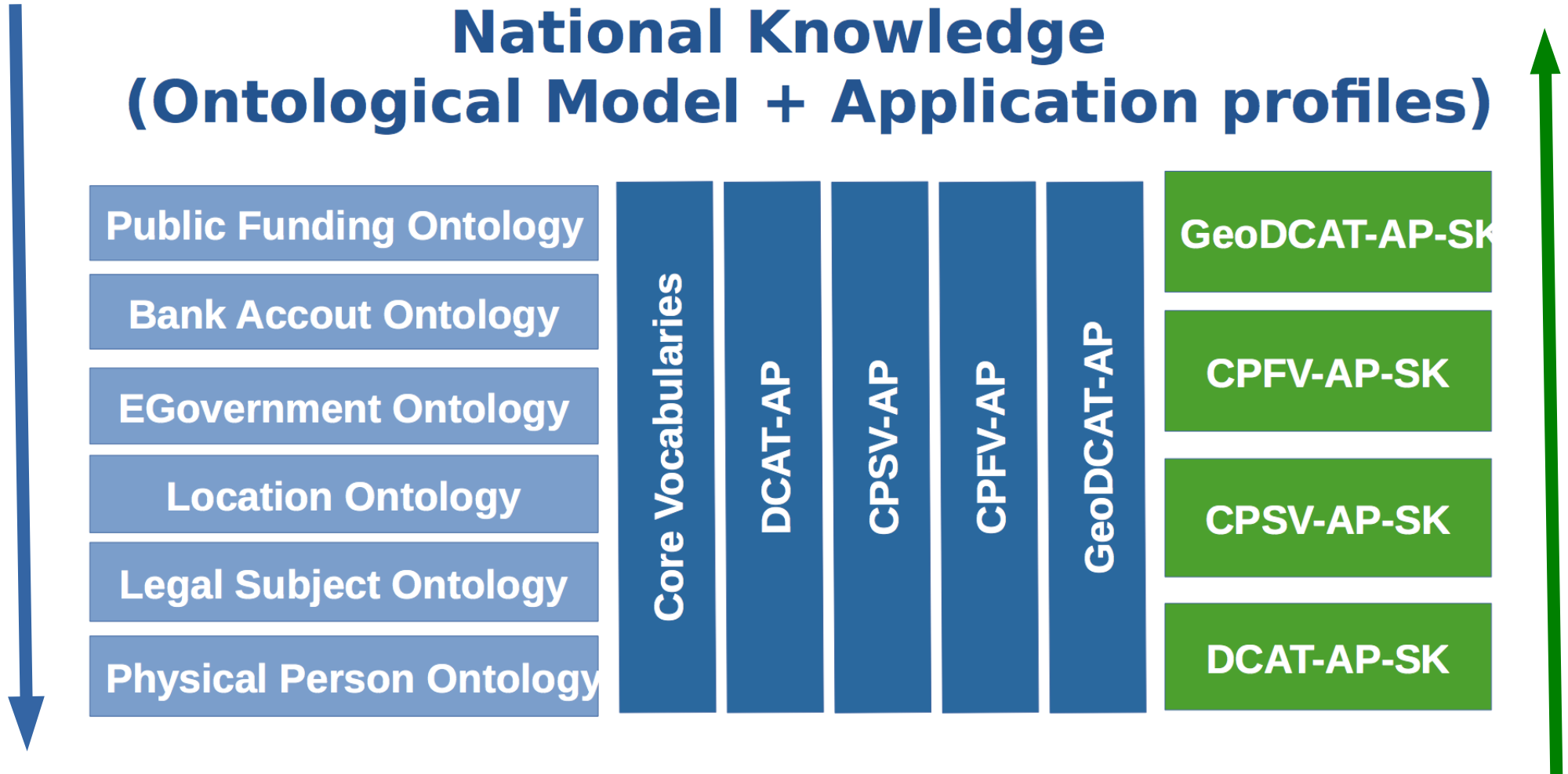
Slovakian Semantic Interoperability Framework



[https://data.gov.sk/\[type\]/\[classifier\]/\[identity\]](https://data.gov.sk/[type]/[classifier]/[identity])

Slovakian Semantic Interoperability Framework

National Knowledge (Ontological Model + Application profiles)



Standardized Ontologies for SK data

← → ↻ https://metais.finance.gov.sk/publicspace?pageId=24939657



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AND DATA OBJECTS ▾

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 - **Publikačné profily**
 - **Centrálny model údajov verejnej správy**
 - **Kontrolované slovníky**
 - **Základné referenčné údaje (príklady)**
- **Technická interoperabilita**
 - **XML schémy**
 - **Dataset registrovaných URI identifikátorov**
 - **Pravidlá tvorby URI identifikátorov**
 - **Dereferenciácia URI identifikátorov**
- **Právna interoperabilita**
 - **Metodický pokyn k Výnosu o štandardoch pre IS VS**

Created by: miroslav.liska, Last updated by: miroslav.liska, Last updated date: 28-03-2018 10:03:01

Centrálny model údajov verejnej správy 1.1

Prehľad ontológií a ich distribúcií (2018-03-26)

Ontológia fyzickej osoby	RDF/XML	UML/PNG	HTML	PDF
Ontológia právneho subjektu	RDF/XML	UML/PNG	HTML	PDF
Ontológia finančných entít	RDF/XML	UML/PNG	HTML	PDF
Ontológia lokácie	RDF/XML	UML/PNG	HTML	PDF
Ontológia egovernment entít	RDF/XML	UML/PNG	HTML	PDF

Application profiles for SK data

← → ↺ https://metais.finance.gov.sk/publicspace?pagelId=23987267



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Created by: miroslav.liska, Last updated by: miroslav.liska, Last updated date: 14-05-2018 09:05:16

Prehľad verzií Publikačných profilov

Názov	Popis
DCAT-AP-SK	Pravidlá pre publikáciu metadát otvorených údajov (povinné a nepovinné vlastnosti katalógov, datasetov a distribúcií)
CPSV-AP-SK	Pravidlá pre publikáciu datasetov obsahujúcich verejné elektronické služby

Příklady národných implementácií DCAT-AP:

Nemecko <http://www.dcat-ap.de/>

Belgicko <http://dcat.be/>

Nórsko <https://doc.difi.no/dcat-ap-no/>

Taliansko <https://www.dati.gov.it/content/dcat-ap-it-v10-profilo-italiano-dcat-ap-0>

URIs for public resources

← → ↻ <https://metais.finance.gov.sk/detail/PO/d5e4b6f4-f103-44f1-b588-9db280e7d850/cimaster?tab=basicForm>



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Central government
departments and
agencies

Subordinate public body

IS operators - not a
public body

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Public authority: Ministerstvo financií Slovenskej republiky

Basic information

[Detailed information](#)

[Relationships](#)

Owner: [Garant eGovernmentu](#)

Name: Ministerstvo financií Slovenskej republiky

English name:

Description:

English description:

Note: Pôvodný kód Meta IS: osoba_2

MetaIS code: 00151742

Reference identifier: <https://data.gov.sk/id/legal-subject/00151742>

Relationships to related items

Application service (818)

[Data element \(593\)](#)

[eGov service \(288\)](#)

[ISVS \(204\)](#)

[Agenda \(166\)](#)

[Section of](#)

[RDS - register](#)

Name: RDS - register

MetaIS code: as_58465

Manager: Ministerstvo financií Slovenskej republiky


Evidence status: Created


Relationships:

- [Public authority is manager of application service](#) : Created

URIs for public resources

← → ↻ <https://metais.finance.gov.sk/detail/PO/d5e4b6f4-f103-44f1-b588-9db280e7d850/cimaster?tab=basicForm>



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Public authority: Ministerstvo financií Slovenskej republiky

Basic information | [Detailed information](#) | [Relationships](#)

Owner: [Garant eGovernmentu](#)

Name: Ministerstvo financií Slovenskej republiky

English name:

Description:

<https://data.gov.sk/id/legal-subject/00151742>

Relationships to related items

Application service (818) | [Data element \(593\)](#) | [eGov service \(288\)](#) | [ISVS \(204\)](#) | [Agenda \(166\)](#) | [Section of](#)

[RDS - register](#)

Name: RDS - register

MetaIS code: as_58465

Manager: Ministerstvo financií Slovenskej republiky

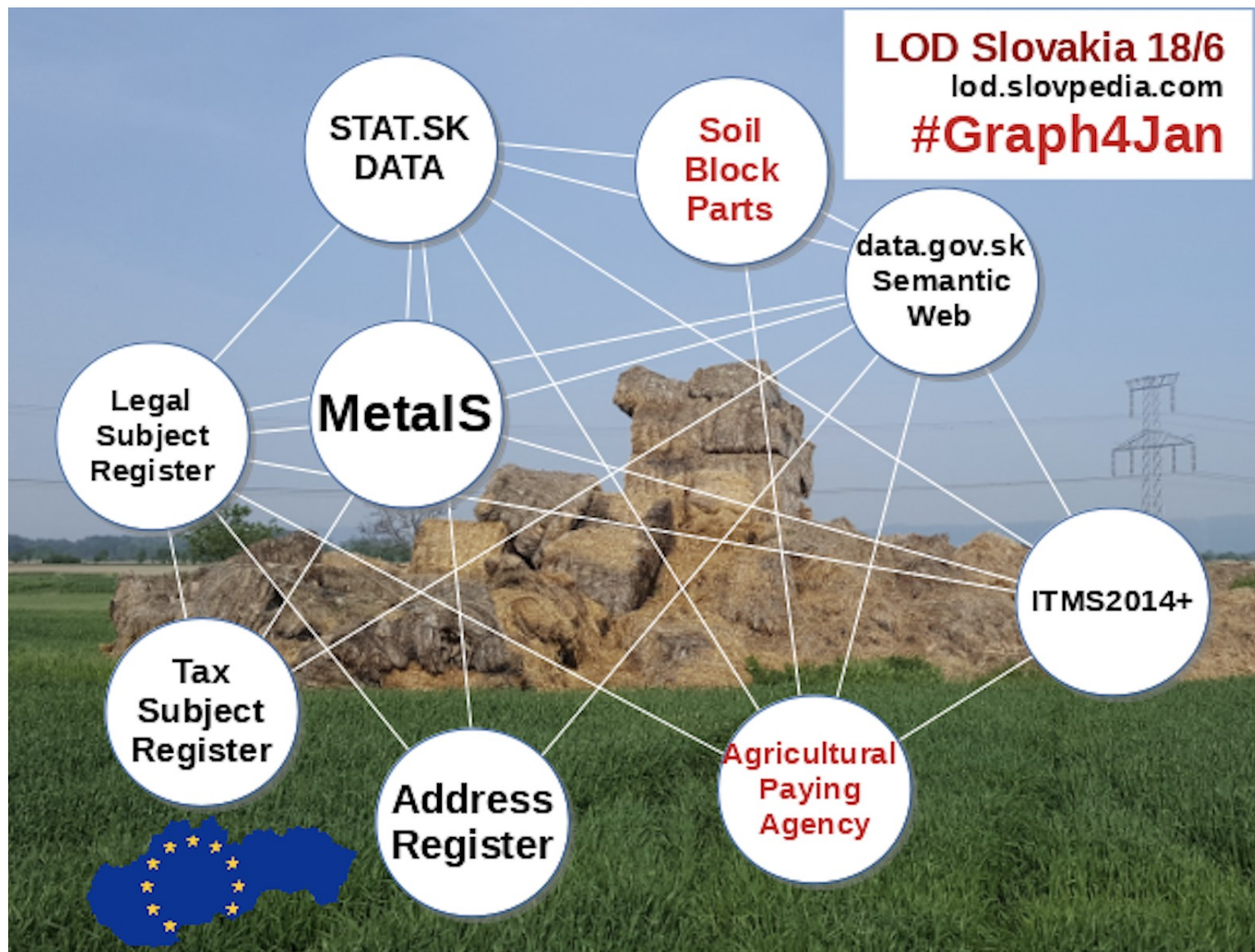
Evidence status: Created

Relationships:

- [Public authority is manager of application service](#) : Created

2018

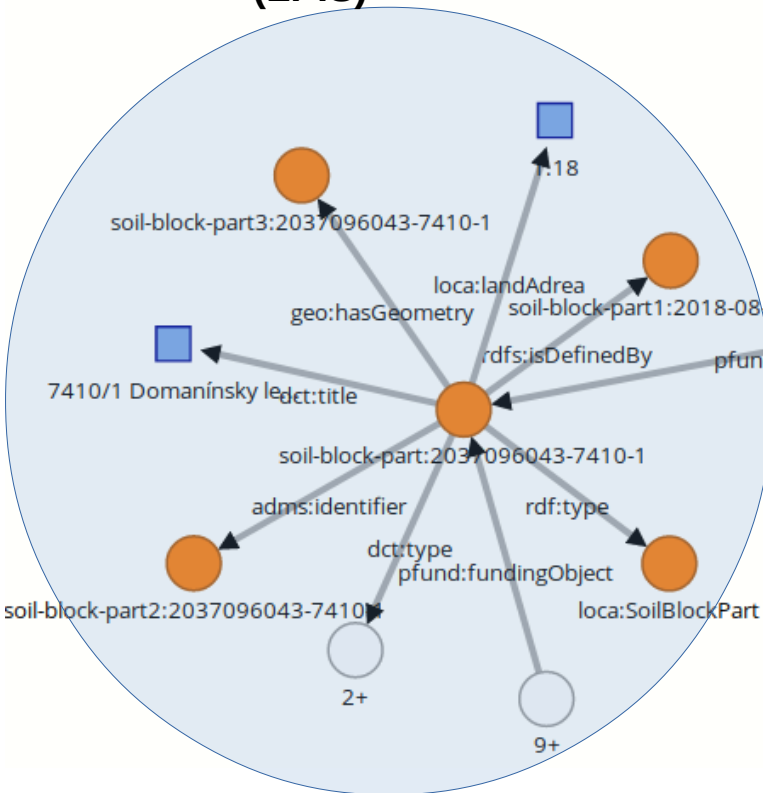
LOD Slovakia 2018



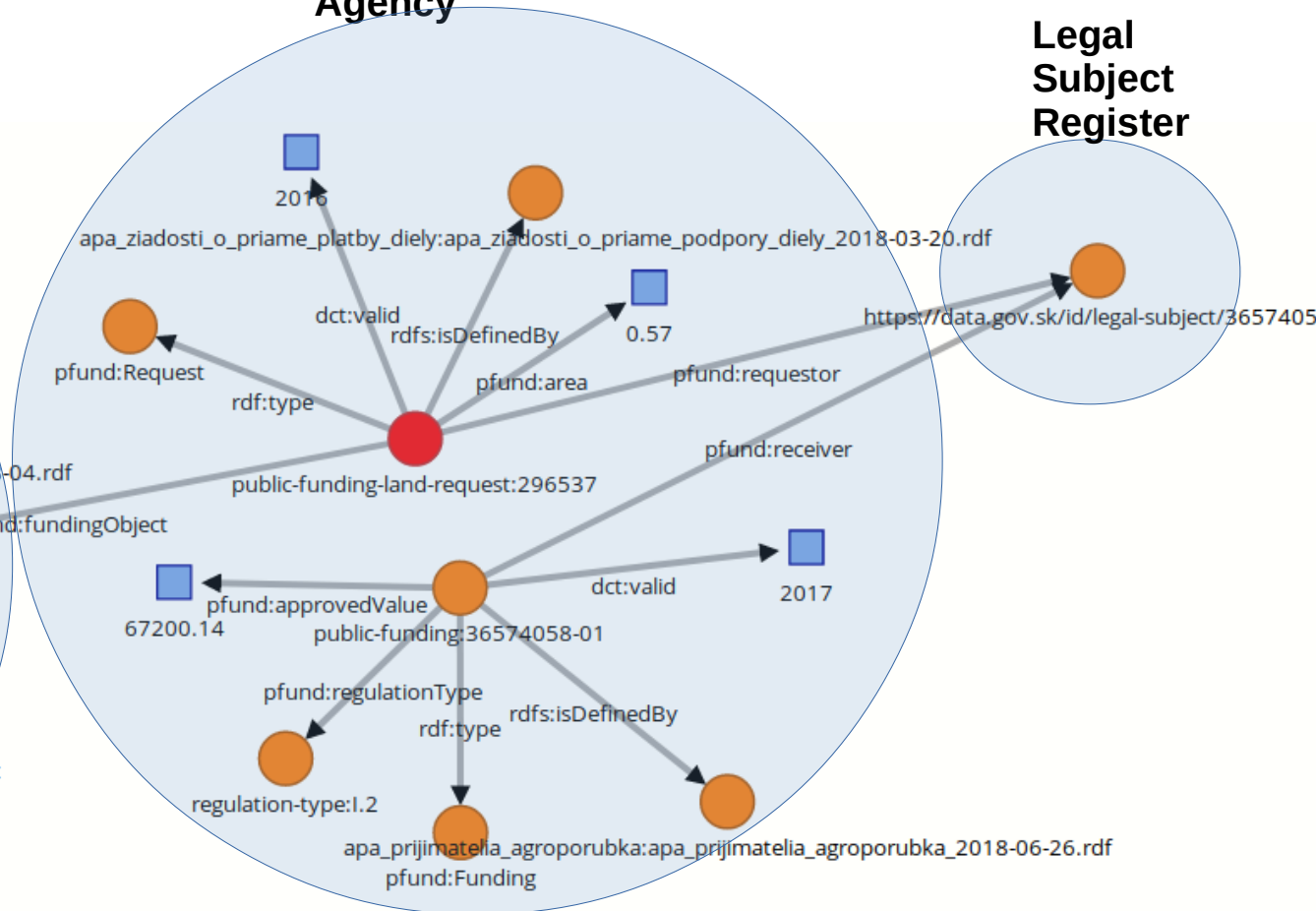
LOD Slovakia 2018



Soil Register (LPIS)



Slovakian Agricultural Paying Agency



Legal Subject Register

LOD Slovakia 2018



slovpedia.com

Slovakian Linked Open Government Data

LOD Slovakia
#Graph4Jan



HOME

DATA

PUBLICATIONS

42 datasets, 19,954,488 triples

0202/1 Raškovce|

×

0202/1 Raškovce Soil Block Part

<https://lodslovakia.eu/id/agro/soil-block-part/-1311533630-0202-1>

Obec Malé Raškovce Legal Subject

<https://data.gov.sk/id/legal-subject/00325473>

Obec Veľké Raškovce Legal Subject

<https://data.gov.sk/id/legal-subject/00332054>

Podielnicke družstvo SKARABEUS-AGRO Legal Subject

<https://data.gov.sk/id/legal-subject/31718493>

0202/1 Bašta Soil Block Part

<https://lodslovakia.eu/id/agro/soil-block-part/64185039-0202-1>

0202/1 Bajč Soil Block Part

<https://lodslovakia.eu/id/agro/soil-block-part/SK0231501034-0202-1>

0202/1 Badín Soil Block Part

<https://lodslovakia.eu/id/agro/soil-block-part/SK0321508454-0202-1>

0202/1 Ábelová Soil Block Part

<https://lodslovakia.eu/id/agro/soil-block-part/SK0326511226-0202-1>

0202/1 Babiná Soil Block Part

<https://lodslovakia.eu/id/agro/soil-block-part/SK032B518166-0202-1>

0202/1 Batizovce Soil Block Part

<https://lodslovakia.eu/id/agro/soil-block-part/SK0416523402-0202-1>

Q

LOD Slovakia 2018



<https://lodslovakia.eu/id/agro/soil-block-part/-1311533630-0202-1>



[dct:title](#)

0202/1 Raškovce

[Agricultural Paying Agency](#)

[Public funding requests for cultural land parts](#)

[loca:landAdrea](#)

2.05

[Agricultural Paying Agency](#)

[Public funding requests for cultural land parts](#)

[geo:hasGeometry](#)



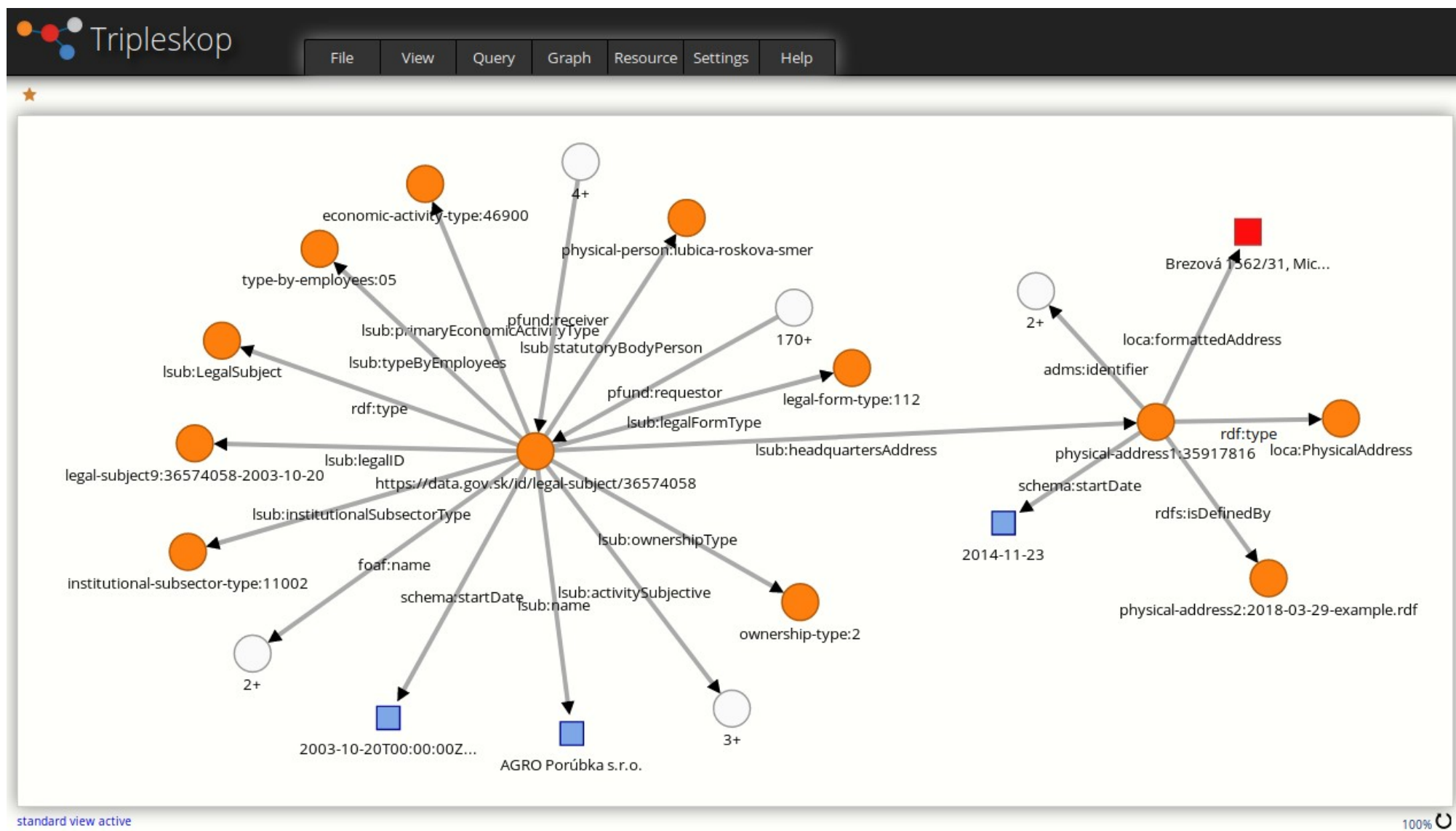
[geo:hasGeometry](#)

<https://lodslovakia.eu/id/geometry/agro/soil-block-part/-1311533630-0202-1>

[Agricultural Paying Agency](#)

[Public funding requests for cultural land parts](#)

LOD Slovakia 2018



2019

Memorandum of understanding



TECHNISCHE
UNIVERSITÄT
WIEN



- **Setting interoperability of Austrian public linked data with ISA2**
- **Austrian**
 - public resource persistent URI pattern**
 - application profiles**
(DCAT-AP-AT, GeoDCAT-AP-AT,...)
 - core vocabularies**
(Person, Location, Registered Organization...)
 - shared taxonomies**
(national codelists, ...)



CITYSPIN

Linked Data Alliance Austria

LinkedDataAllianceAT ★ ☰

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➤ Minutes

▼ Overall Guidelines

▼ Austrian Semantic Interopera...

• **URI for public austrian re...**

• The Linked Data Alliance Austria

Pages / ... / Austrian Semantic Interoperability Framework 🔒

✎ Edit ☆ 👁 📄 ... ↗

URI for public austrian resource

Created by Miroslav Liska, last modified on Feb 10, 2019

Base pattern:

[https://linkeddata.gv.at/\[type\]/\[classifier\]/\[identity\]](https://linkeddata.gv.at/[type]/[classifier]/[identity])

where

- **Type:** {id, def, set, doc}, where
 - **id** = resource represents object existing in real world (person, organization, document, administrative unit ...)
 - **def** = resource represents abstract entity, mostly metadata (ontology, taxonomy ...)
 - **set** = resource represents dataset
 - **doc** = resource represents document
- **Classifier:** class, concept
- **Identity:** unique identifier of resource, mostly automatically generated

[https://data.gv.at/\[type\]/\[classifier\]/\[identity\]](https://data.gv.at/[type]/[classifier]/[identity])

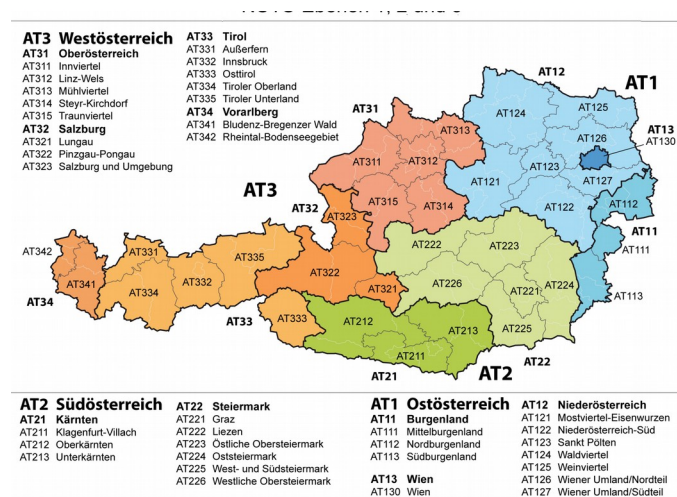
Linked Data Alliance Austria

NUTS Austria

```
<nuts:NUTS0 rdf:about="https://linkeddata.gv.at/id/nuts0/AT">  
  <dct:title xml:lang="eng">Austria</dct:title>  
</nuts:NUTS0>
```

```
<nuts:NUTS2 rdf:about="https://linkeddata.gv.at/id/nuts2/AT13">  
  <dct:title xml:lang="eng">Wien</dct:title>  
</nuts:NUTS2>
```

```
<nuts:NUTS3rdf:about="https://linkeddata.gv.at/id/nuts3/AT112">  
  <dct:title xml:lang="eng">Nordburgenland</dct:title>  
</nuts:NUTS3>
```



Linked Data Alliance Austria

Address: Neubaugasse 1, Wien

```
<locn:Address rdf:about="https://linkeddata.gv.at/id/address/wien/10070849">
  <locn:location rdf:resource="https://linkeddata.gv.at/id/laul/1007"/>
  <locn:thoroughfare rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Neubaugasse</locn:thoroughfare>
  <locn:locatorDesignator rdf:datatype="http://www.w3.org/2001/XMLSchema#string">1</locn:locatorDesignator>
  <locn:fullAddress rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Neubaugasse 1, 1070 Wien</locn:fullAddress>
  <locn:addressID rdf:datatype="http://www.w3.org/2001/XMLSchema#string">10070849</locn:addressID>
  <locn:geometry>
    <locn:Geometry rdf:about="https://linkeddata.gv.at/id/geometry/address/wien/10070849">
      <geo:asWKT rdf:datatype="http://www.opengis.net/ont/geosparql#wktLiteral">Point((48.198502, 16.349729))</geo:asWKT>
    </locn:Geometry>
  </locn:geometry>
</locn:Address>
```

Legal subject: Semantic Web Company

```
<rov:Organization rdf:about="https://linkeddata.gv.at/id/registered-organization/323939g">
  <rov:LegalName xml:lang="eng">Semantic Web Company GmbH</rov:LegalName>
</rov:Organization>
```

Part3.

Conclusion

Address example - LOCN Vocabulary Belgian example



© vectors.co.nz

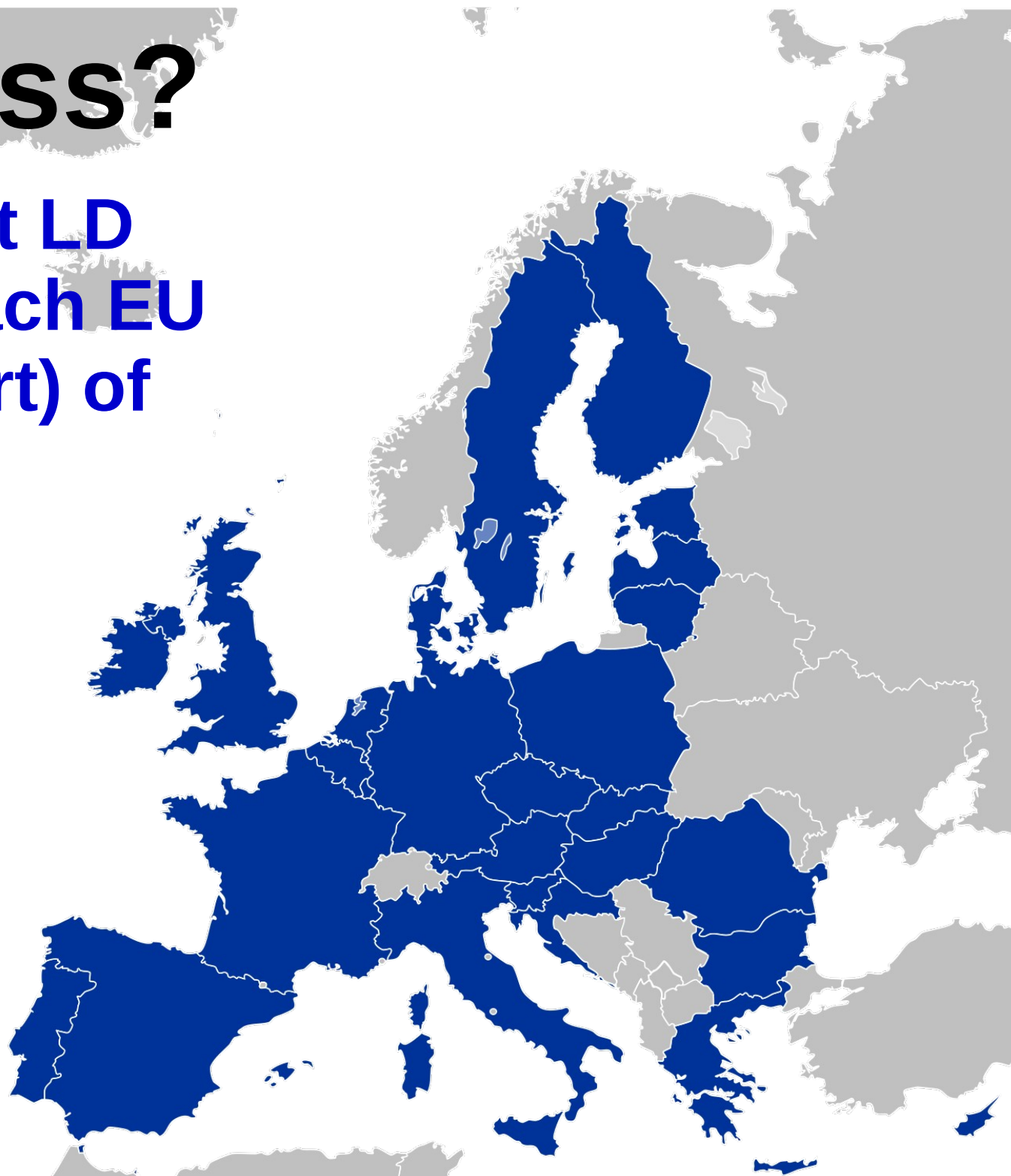
```
<?xml version="1.0" encoding="utf-8" ?>
= <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#" xmlns:locn="http://www.w3.org/ns/locn#"
  xmlns:ns3="http://purl.org/dc/terms/" xmlns:ns4="http://example.com/">
= <rdf:Description rdf:about="http://location.testproject.eu/so/ad/Object/AGIV/2000017467">
  <locn:address rdf:resource="http://location.testproject.eu/so/ad/Address/AGIV/2000017467" />
  </rdf:Description>
= <rdf:Description rdf:about="http://location.testproject.eu/so/ad/Address/AGIV/2000017467">
  <rdf:type rdf:resource="http://www.w3.org/ns/locn#Address" />
  <locn:geometry rdf:resource="http://location.testproject.eu/so/ad/Object/AGIV/2000017467" />
  <locn:fullAddress>Hoeilaart, Terhulpsesteenweg, 5</locn:fullAddress>
  <locn:thoroughfare>Terhulpsesteenweg</locn:thoroughfare>
  <locn:locatorDesignator>5</locn:locatorDesignator>
  <locn:adminUnitL1>België</locn:adminUnitL1>
  <locn:adminUnitL2>Vlaams Gewest</locn:adminUnitL2>
  <locn:adminUnitL3>Provincie Vlaams-Brabant</locn:adminUnitL3>
  <locn:adminUnitL4>Arrondissement Halle-Vilvoorde</locn:adminUnitL4>
  <locn:adminUnitL5>Hoeilaart</locn:adminUnitL5>
  <locn:postCode rdf:datatype="http://www.w3.org/2001/XMLSchema#integer">1560</locn:postCode>
  <ns4:osmVisualization>http://nominatim.openstreetmap.org/search?q=Terhulpsesteenweg
    5,Hoeilaart&polygon=1</ns4:osmVisualization>
  <ns4:adminUnit rdf:resource="http://location.testproject.eu/so/au/AdministrativeUnit/STATBEL/23033"
    />
  <ns4:road rdf:resource="http://location.testproject.eu/so/tn/Road/RN/15601625" />
  </rdf:Description>
</rdf:RDF>
```


What I miss?

**Clear consistent LD
examples for each EU
country (for start) of**

**Citizen
Company
Address
Location**

...



**Thank you for
your attention**